

Masashi Yoshimura

List of Publications by Year in descending order

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121
papers

2,123
citations

201674

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128
all docs

128
docs citations

128
times ranked

943
citing authors

#	ARTICLE	IF	CITATIONS
1	Effect of carbon additive on increases in the growth rate of 2in GaN single crystals in the Na flux method. Journal of Crystal Growth, 2008, 310, 3946-3949.	1.5	124
2	Promoted nitrogen dissolution due to the addition of Li or Ca to Ga-Na melt; some effects of additives on the growth of GaN single crystals using the sodium flux method. Journal of Crystal Growth, 2005, 284, 91-99.	1.5	85
3	Continuous-wave all-solid-state 244 nm deep-ultraviolet laser source by fourth-harmonic generation of an optically pumped semiconductor laser using CsLiB ₆ O ₁₀ in an external resonator. Optics Letters, 2008, 33, 1705.	3.3	80
4	Progress in the growth of a CsLiB ₆ O ₁₀ crystal and its application to ultraviolet light generation. Optical Materials, 2003, 23, 343-351.	3.6	71
5	Growth of GaN single crystals with extremely low dislocation density by two-step dislocation reduction. Journal of Crystal Growth, 2009, 311, 3019-3024.	1.5	66
6	Growth of a Large GaN Single Crystal Using the Liquid Phase Epitaxy (LPE) Technique. Japanese Journal of Applied Physics, 2003, 42, L4-L6.	1.5	65
7	Fabrication of low-curvature 2 in. GaN wafers by Na-flux coalescence growth technique. Applied Physics Express, 2014, 7, 035503.	2.4	65
8	Femtosecond Laser-Induced Crystallization of 4-(Dimethylamino)-N-methyl-4-stilbazolium Tosylate. Crystal Growth and Design, 2005, 5, 861-863.	3.0	58
9	Growth of Large GaN Single Crystals on High-Quality GaN Seed by Carbon-Added Na Flux Method. Applied Physics Express, 2010, 3, 075501.	2.4	57
10	Novel Liquid Phase Epitaxy (LPE) Growth Method for Growing Large GaN Single Crystals: Introduction of the Flux Film Coated-Liquid Phase Epitaxy (FFC-LPE) Method. Japanese Journal of Applied Physics, 2003, 42, L879-L881.	1.5	52
11	The influences of supersaturation on LPE growth of GaN single crystals using the Na flux method. Journal of Crystal Growth, 2004, 270, 402-408.	1.5	51
12	Recent progress of Na-flux method for GaN crystal growth. Japanese Journal of Applied Physics, 2019, 58, SC0803.	1.5	48
13	Drastic Decrease in Dislocations during Liquid Phase Epitaxy Growth of GaN Single Crystals Using Na flux Method without Any Artificial Processes. Japanese Journal of Applied Physics, 2006, 45, 2528-2530.	1.5	46
14	Centimeter-Sized Bulk GaN Single Crystals Grown by the Na-Flux Method with a Necking Technique. Crystal Growth and Design, 2012, 12, 3799-3805.	3.0	46
15	Growth of Transparent, Large Size GaN Single Crystal with Low Dislocations Using Ca-Na Flux System. Japanese Journal of Applied Physics, 2003, 42, L729-L731.	1.5	45
16	Homoepitaxial Hydride Vapor Phase Epitaxy Growth on GaN Wafers Manufactured by the Na-Flux Method. Crystal Growth and Design, 2017, 17, 3806-3811.	3.0	45
17	Anisotropic complex refractive index of $\hat{\Gamma}^2$ -Ga ₂ O ₃ bulk and epilayer evaluated by terahertz time-domain spectroscopy. Applied Physics Letters, 2021, 118, .	3.3	45
18	Dramatic reduction of dislocations on a GaN point seed crystal by coalescence of bunched steps during Na-flux growth. Journal of Crystal Growth, 2015, 427, 87-93.	1.5	42

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19	Strong yellow emission of high-conductivity bulk ZnO single crystals irradiated with high-power gyrotron beam. Applied Physics Letters, 2017, 111, .	3.3	42
20	Ultraviolet laser-induced degradation of CsLiB ₆ O ₁₀ and $\hat{1}^2$ -BaB ₂ O ₄ . Optical Materials Express, 2014, 4, 559.	3.0	40
21	Promotion of protein crystal growth by actively switching crystal growth mode via femtosecond laser ablation. Nature Photonics, 2016, 10, 723-726.	31.4	40
22	Terahertz Comb Spectroscopy Traceable to Microwave Frequency Standard. IEEE Transactions on Terahertz Science and Technology, 2013, 3, 322-330.	3.1	39
23	Terahertz time-domain ellipsometry with high precision for the evaluation of GaN crystals with carrier densities up to 10^{20} cm ⁻³ . Scientific Reports, 2021, 11, 18129.	3.3	37
24	Promotion of lateral growth of GaN crystals on point seeds by extraction of substrates from melt in the Na-flux method. Applied Physics Express, 2019, 12, 045508.	2.4	33
25	Vapor-phase epitaxy of high-crystallinity GaN films using Ga ₂ O vapor and NH ₃ . Journal of Crystal Growth, 2010, 312, 676-679.	1.5	32
26	Selective crystallization of metastable phase of acetaminophen by ultrasonic irradiation. Applied Physics Express, 2015, 8, 065501.	2.4	31
27	Application of a Stirring Method to Micro-Scale and Vapor Diffusion Protein Crystallization. Japanese Journal of Applied Physics, 2003, 42, L314-L315.	1.5	30
28	Coalescence Growth of Dislocation-Free GaN Crystals by the Na-Flux Method. Applied Physics Express, 2012, 5, 095501.	2.4	29
29	Selective crystallization of the metastable phase of indomethacin at the interface of liquid/air bubble induced by femtosecond laser irradiation. Applied Physics Express, 2015, 8, 045501.	2.4	26
30	Development of a 2-inch GaN wafer by using the oxide vapor phase epitaxy method. Japanese Journal of Applied Physics, 2019, 58, SC1043.	1.5	26
31	Study of the metastable region in the growth of GaN using the Na flux method. Journal of Crystal Growth, 2009, 311, 4647-4651.	1.5	25
32	Growth of bulk GaN crystals by the Na-flux point seed technique. Japanese Journal of Applied Physics, 2014, 53, 05FA06.	1.5	25
33	Effect of water impurity in CsLiB ₆ O ₁₀ crystals on bulk laser-induced damage threshold and transmittance in the ultraviolet region. Applied Optics, 2009, 48, 1658.	2.1	24
34	Vapor-phase epitaxial growth of GaN films using Ga ₂ O vapor and NH ₃ . Journal of Crystal Growth, 2012, 350, 56-59.	1.5	21
35	Growth of Prismatic GaN Single Crystals with High Transparency on Small GaN Seed Crystals by Ca ²⁺ -Li-Added Na Flux Method. Applied Physics Express, 2012, 5, 025503.	2.4	20
36	High-power DUV picosecond pulse laser with a gain-switched-LD-seeded MOPA and large CLBO crystal. Optics Letters, 2020, 45, 2351.	3.3	20

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37	Al Doping of CsLiB6O10 for High Resistance to Ultraviolet-Induced Degradation. Applied Physics Express, 2013, 6, 022701.	2.4	19
38	Picosecond high-power 355-nm UV generation in CsLiB ₆ O ₁₀ crystal. Optics Express, 2016, 24, 30465.	3.4	17
39	Quantized conductance observed during sintering of silver nanoparticles by intense terahertz pulses. Applied Physics Letters, 2018, 112, 163102.	3.3	17
40	A first-principles study on nitrogen solubility in Na flux toward theoretical search for a novel flux for bulk GaN growth. Journal of Crystal Growth, 2007, 303, 34-36.	1.5	15
41	Crystallization of aspirin form II by femtosecond laser irradiation. Applied Physics Express, 2019, 12, 015507.	2.4	15
42	Growth of GaN films with low oxygen concentration using Ga ₂ O vapor and NH ₃ . Journal of Crystal Growth, 2011, 327, 89-93.	1.5	14
43	Metastable crystal growth of acetaminophen using solution-mediated phase transformation. Applied Physics Express, 2017, 10, 015501.	2.4	14
44	Extreme reduction of on-resistance in vertical GaN p-n diodes by low dislocation density and high carrier concentration GaN wafers fabricated using oxide vapor phase epitaxy method. Applied Physics Express, 2020, 13, 071010.	2.4	14
45	High-Temperature Growth of GaN Single Crystals Using Li-Added Na-Flux Method. Japanese Journal of Applied Physics, 2012, 51, 121002.	1.5	14
46	Effect of Gel-Solution Interface on Femtosecond Laser-Induced Nucleation of Protein. Crystal Growth and Design, 2013, 13, 1491-1496.	3.0	13
47	Effect of H ₂ carrier gas on the physical properties of a GaN layer grown using Ga ₂ O vapor and NH ₃ . Journal of Crystal Growth, 2014, 392, 1-4.	1.5	13
48	Homoepitaxial growth of GaN crystals by Na-flux dipping method. Japanese Journal of Applied Physics, 2015, 54, 105501.	1.5	13
49	Enhancement of lateral growth of the GaN crystal with extremely low dislocation density during the Na-flux growth on a point seed. Journal of Crystal Growth, 2017, 468, 827-830.	1.5	13
50	DEVELOPMENT OF NEW NLO BORATE CRYSTALS. Journal of Nonlinear Optical Physics and Materials, 2001, 10, 249-263.	1.8	12
51	Improvement in UV Optical Properties of CsLiB6O10 by Reducing Water Molecules in the Crystal. Japanese Journal of Applied Physics, 2005, 44, L699-L700.	1.5	12
52	Growth of high-quality metastable crystal of acetaminophen using solution-mediated phase transformation at low supersaturation. Journal of Crystal Growth, 2018, 502, 76-82.	1.5	12
53	Crystallization of acetaminophen form II by plastic-ball-assisted ultrasonic irradiation. Applied Physics Express, 2017, 10, 025501.	2.4	11
54	Growth of High-Quality CsLiB6O10 Crystals from Materials Mixed in Aqueous Solution. Japanese Journal of Applied Physics, 2004, 43, 1073-1075.	1.5	10

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55	Development of protein seed crystals reinforced with high-strength hydrogels. CrystEngComm, 2015, 17, 8064-8071.	2.6	10
56	Absolute surface energies of oxygen-adsorbed GaN surfaces. Journal of Crystal Growth, 2020, 549, 125868.	1.5	10
57	First-principles investigation of the GaN growth process in carbon-added Na-flux method. Physica Status Solidi (B): Basic Research, 2015, 252, 1084-1088.	1.5	9
58	A crystallization technique for obtaining large protein crystals with increased mechanical stability using agarose gel combined with a stirring technique. Journal of Crystal Growth, 2016, 452, 172-178.	1.5	9
59	Increase in the growth rate of GaN crystals by using gaseous methane in the Na flux method. Japanese Journal of Applied Physics, 2017, 56, 055502.	1.5	9
60	Improvement of metastable crystal of acetaminophen via control of crystal growth rate. Applied Physics Express, 2018, 11, 035501.	2.4	9
61	Growth of high-quality transparent SrB ₄ O ₇ single crystals with high degradation resistance for DUV laser application. Applied Physics Express, 2018, 11, 125501.	2.4	8
62	Intergrowth of two aspirin polymorphism observed with Raman spectroscopy. Journal of Crystal Growth, 2020, 532, 125430.	1.5	8
63	High surface laser-induced damage threshold of SrB ₄ O ₇ single crystals under 266-nm (DUV) laser irradiation. Optics Express, 2020, 28, 29239.	3.4	8
64	High Temperature Growth of Non-polar-plane GaN Film Grown Using Gallium-Oxide as Ga Source. Japanese Journal of Applied Physics, 2013, 52, 025503.	1.5	7
65	Optical damage assessment and recovery investigation of hydrogen-ion and deuterium-ion plasma-irradiated bulk ZnO single crystals. Journal of Applied Physics, 2017, 121, .	2.5	7
66	Effect of methane additive on GaN growth using the OVPE method. Japanese Journal of Applied Physics, 2019, 58, SC1021.	1.5	7
67	Growth of large and high quality CsLiB ₆ O ₁₀ crystals from self-flux solutions for high resistance against UV laser-induced degradation. Applied Physics Express, 2019, 12, 075501.	2.4	7
68	Anomalous dislocation annihilation behavior observed in a GaN crystal grown on point seeds by the Na-flux method. Applied Physics Express, 2020, 13, 085510.	2.4	7
69	Crack-free GaN substrates grown by the Na-flux method with a sapphire dissolution technique. Applied Physics Express, 2016, 9, 071002.	2.4	6
70	Large-scale crystallization of acetaminophen trihydrate by a novel stirring technique. Applied Physics Express, 2019, 12, 045503.	2.4	6
71	Investigations on the electric-dipole allowed 4f ² 5d → 4f ³ broadband emission of Nd ³⁺ -doped 20Al(PO ₃) ₃ -80LiF glass for potential VUV scintillator application. Journal of Alloys and Compounds, 2021, 856, 158096.	5.5	6
72	Terahertz Generation and Optical Properties of Lithium Ternary Chalcogenide Crystals. Journal of Infrared, Millimeter, and Terahertz Waves, 2011, 32, 426-433.	2.2	5

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73	Effect of flux composition ratio on the coalescence growth of GaN crystals by the Na-flux method. <i>Optical Materials</i> , 2017, 65, 38-41.	3.6	5
74	Third harmonic generation from InSb excited by Free Electron Laser. , 2018, , .		5
75	Growth of GaN single crystals with high transparency by the Li-added Na-flux method. <i>Journal of Crystal Growth</i> , 2020, 535, 125478.	1.5	5
76	Growth Enhancement of Organic Nonlinear Optical Crystals by Femtosecond Laser Ablation. <i>Journal of Physical Chemistry C</i> , 2021, 125, 8391-8397.	3.1	5
77	Multicolor imaging of calcium-binding proteins in human kidney stones for elucidating the effects of proteins on crystal growth. <i>Scientific Reports</i> , 2021, 11, 16841.	3.3	5
78	Stable 10,000-hour operation of 20-W deep ultraviolet laser generation at 266 nm. <i>Optics Express</i> , 2022, 30, 11797.	3.4	5
79	Dependence of polarity inversion on V/III ratio in α -GaIn growth by oxide vapor phase epitaxy. <i>Japanese Journal of Applied Physics</i> , 2016, 55, 05FA11.	1.5	4
80	First-principles study of the surface phase diagrams of GaN(0001) and (000 $\bar{1}$) under oxide vapor phase epitaxy growth conditions. <i>Physica Status Solidi (B): Basic Research</i> , 2017, 254, 1600706.	1.5	4
81	Atomic-Scale Imaging of Surface and Hydration Structures of Stable and Metastable Acetaminophen Crystals by Frequency Modulation Atomic Force Microscopy. <i>Journal of Physical Chemistry C</i> , 2018, 122, 21983-21990.	3.1	4
82	Floral design GaN crystals: low-resistive and low-dislocation-density growth by oxide vapor phase epitaxy. <i>Japanese Journal of Applied Physics</i> , 2021, 60, 095501.	1.5	4
83	Increase in the growth rate of GaN single crystals grown by gallium hydride vapor phase epitaxy method. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2008, 5, 1719-1722.	0.8	3
84	High-Temperature Growth of GaN Single Crystals Using Li-Added Na-Flux Method. <i>Japanese Journal of Applied Physics</i> , 2012, 51, 121002.	1.5	3
85	Growth of GaN layers using Ga ₂ O vapor synthesized from Ga ₂ O ₃ and carbon. <i>Journal of Crystal Growth</i> , 2020, 535, 125524.	1.5	3
86	Microflow system promotes acetaminophen crystal nucleation. <i>Engineering in Life Sciences</i> , 2020, 20, 395-401.	3.6	3
87	Temperature dependence of nitrogen dissolution on Na flux growth. <i>Journal of Crystal Growth</i> , 2020, 535, 125549.	1.5	3
88	DUV coherent light emission from ultracompact microcavity wavelength conversion device. <i>Optics Express</i> , 2022, 30, 18628.	3.4	3
89	Homoepitaxial growth of a-plane GaN layers by reaction between Ga ₂ O vapor and NH ₃ gas. <i>Japanese Journal of Applied Physics</i> , 2015, 54, 065501.	1.5	2
90	First-principles study of polar, nonpolar, and semipolar GaN surfaces during oxide vapor phase epitaxy growth. <i>Japanese Journal of Applied Physics</i> , 2018, 57, 115504.	1.5	2

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91	Development of Polymorphic Control Technology for Pharmaceutical Compounds. , 2019, , 269-291.		2
92	Fabrication of a 1.5-inch freestanding GaN substrate by selective dissolution of sapphire using Li after the Na-flux growth. Journal of Crystal Growth, 2020, 533, 125462.	1.5	2
93	Influence of GaN/sapphire contact area on bowing of GaN wafer grown by the Na-flux method with a sapphire dissolution process. Japanese Journal of Applied Physics, 2020, 59, 025505.	1.5	2
94	Fabrication of GaN crystals with low threading dislocation density and low resistivity by thin flux growth in the Na-flux point seed technique. Japanese Journal of Applied Physics, 2020, 59, 035501.	1.5	2
95	Impurity and Defect Control of Nonlinear Optical Crystal CsLiB6O10 for Improving Ultraviolet Laser-Induced Damage Tolerance. The Review of Laser Engineering, 2013, 41, 830.	0.0	2
96	High-rate OVPE-GaN growth by the suppression of polycrystal formation with additional H ₂ O vapor in a high-temperature condition. Applied Physics Express, 2020, 13, 095504.	2.4	2
97	Effect of additional N ₂ O gas on the suppression of polycrystal formation and high-rate GaN crystal growth by OVPE method. Journal of Crystal Growth, 2022, 581, 126495.	1.5	2
98	Growth of KLN fiber crystals and its application for blue-violet light geration. Optical Review, 1994, 1, 241-242.	2.0	1
99	The effects of growth temperature on the crystallinity of GaN in gallium hydride vapor phase epitaxy method. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1606-1608.	0.8	1
100	Optical transmittance investigation of 1-keV ion-irradiated sapphire crystals as potential VUV to NIR window materials of fusion reactors. AIP Advances, 2016, 6, .	1.3	1
101	Terahertz Pump-Terahertz Probe Spectroscopy of Multilayer Graphene. , 2018, , .		1
102	Growth of Acetaminophen Polymorphic Crystals and Solution-Mediated Phase Transition from Trihydrate to Form II in Agarose Gel. Crystals, 2021, 11, 1069.	2.2	1
103	Monolithic Wavelength Converter for Ultraviolet Light Using GdYCOB Crystal. The Review of Laser Engineering, 2004, 32, 812-817.	0.0	1
104	Development of High-Quality Nonlinear Optical Crystal CsLiB6O10 and Its Application to High-Power Picosecond Deep-Ultraviolet Pulse Generation. The Review of Laser Engineering, 2015, 43, 23.	0.0	1
105	Suppression of newly generated threading dislocations at the regrowth interface of a GaN crystal by growth rate control in the Na-flux method. Japanese Journal of Applied Physics, 0, , .	1.5	1
106	Influence of oxygen-related defects on the electronic structure of GaN. Japanese Journal of Applied Physics, 2022, 61, 061004.	1.5	1
107	UV laser generation in GdYCOB crystal. Electrical Engineering in Japan (English Translation of Denki) Tj ETQq1 1 0.784314 rgBT /Overl	0.4	0
108	Growth of Nonlinear-Optical Crystals for Laser-Frequency Conversion. , 0, , 445-459.		0

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109	Development of High-Sensitive Electro-Optic Sensor Using DAST Crystals. The Review of Laser Engineering, 2005, 33, 389-394.	0.0	0
110	Organic Crystals for Terahertz Time Domain Spectroscopy Source. The Review of Laser Engineering, 2009, 37, 355-360.	0.0	0
111	Properties of Terahertz Wave Emission from Nano-porous Gold Excited by Femtosecond Laser Pulses. , 2018, , .		0
112	Low resistive and low dislocation GaN wafer produced by OVPE method. , 2019, , .		0
113	Growth of a High Quality GaN Wafer from Point Seeds by the Na-Flux Method. , 2021, , .		0
114	Study of Generation and Detection of Continuous Terahertz Wave Using Chaotic Multi-mode Semiconductor Laser. , 2021, , .		0
115	Report on CLEO/QELS 2001. The Review of Laser Engineering, 2001, 29, 532-548.	0.0	0
116	Protein Crystallization Using Short Pulse Laser. The Review of Laser Engineering, 2006, 34, 135-138.	0.0	0
117	Harmonic Generation of Nd:YAG Laser in $Gd_{x}Y_{1-x}Ca_4O(BO_3)_3$ Crystal (GdYCOB).. The Review of Laser Engineering, 1999, 27, 519-524.	0.0	0
118	Terahertz time-domain spectroscopy of wide-bandgap semiconductors GaN and \hat{I}^2 -Ga ₂ O ₃ . , 2021, , .		0
119	Electrical properties of $\text{\$eta\$}$ -Ga ₂ O ₃ homoepitaxial layer measured by terahertz time-domain spectroscopy. , 2020, , .		0
120	Bulk laser-induced damage resistance of SrB ₄ O ₇ single crystals under 266-nm DUV laser irradiation. Japanese Journal of Applied Physics, 0, , .	1.5	0
121	Kyropoulos growth of a 300-g SrB ₄ O ₇ single crystal using a twin-type stirring blade. Japanese Journal of Applied Physics, 0, , .	1.5	0